

REMARKS

Status of the Claims and Amendment

Claims 1-10 are all the claims pending in the application. Claims 1-10 are rejected.

Claim 4 has been amended to include “urge”. Support for the amendment to claim 4 may be found at least at pages 6-7 of the present specification.

No new matter is added.

Applicants note that the Office Action, at pages 2-3, erroneously states the status of Claims 1-8, 12, 14-21 and 24 and of Claims 9-11, 13, 22-23 and 25. Applicants respectfully request that the Examiner withdraw the statements in the next Office Communication.

Information Disclosure Statements

The Examiner has returned a signed and initialed copy of the PTO Form SB/08 that accompanied the Information Disclosure Statement filed June 12, 2007. No PTO Forms SB/08 remain outstanding.

In addition, Applicants note that the Examiner has not initialed the PTO/SB/08 form with respect to EP-1028111-B1. Applicants respectfully request that the Examiner acknowledge EP-1028111-B1 by providing a signed and initialed copy of the PTO/SB/08 in the next Office Communication.

Claim to Priority

The Examiner has acknowledged Applicants’ claim to priority, and receipt of all the priority documents. However, the Examiner asserts that because Applicants non-English priority document (i.e., Japanese Application No. 2002-323792) was not submitted with a certified

English translation, the effective filing date for the instant application is considered to be November 4, 2003 for prior art purposes.

In response, Applicants submit herewith a certified English translation of Japanese Application No. 2002-323792.

Response To Nonstatutory Obviousness-Type Double Patenting Rejection

On page 6 of the Office Action, the Office asserts that Applicants' arguments submitted August 2, 2007 with regard to the Nonstatutory Obviousness-Type Double Patenting rejection over co-pending Application No. 10/494,018 are persuasive, and thus the rejection has been withdrawn. However, the Office has maintained the Nonstatutory Obviousness-Type Double Patenting rejection over U.S. Patent No. 6,346,532 in view of the following references.

(a) The Office Action cites to Elliot *et al.* (*Mayo Clin Proc.*, 2001;76:353-355) to make the point that anticholinergic therapy remains a cornerstone for treatment of overactive and neurogenic bladders.

(b) The Office Action alleges that the most common cause of urinary incontinence in elderly men and women is overactive bladder, as evidenced by the Cecil Textbook of Medicine (2000, vol. 1, pages 23-24, and 637-642) (hereinafter "Cecil"). The Office Action alleges that Cecil discloses that urge incontinence is the most common and bothersome symptomatic type of urinary incontinence in the geriatric population, and is usually associated with other symptoms of bladder overactivity such as daytime frequency and nocturia. Further, the Office Action alleges that the reference discloses that men, diabetics, and patients with neurologic disorders are at highest risk for this type of urinary incontinence.

c) The Office Action alleges that the prevalence of overactive bladder increases with age, and that older adults are more likely to have overactive bladder with urge incontinence as evidenced by Wagner *et al.* (*The American Journal of Managed Care*, 2002; 8(19, Sup):S598-S607). The Office Action also alleges that Wagner *et al.* disclose that individuals with overactive bladder have a higher prevalence of diabetes and congestive heart failure. Further, the Office Action alleges that Wagner *et al.* disclose that urinary incontinence is a common manifestation of benign and malignant prostate enlargement in middle-aged and older men.

The Office Action concludes from the cited references that the diabetic patient population and the instant targeted treatment population overlaps. In this regard, the Office Action alleges that as the claimed compound is a known treatment for diabetes, the claimed method is inherently anticipated by the use of the claimed compound for diabetes treatment.

In response, Applicants respectfully disagree with the Office Action's assertions regarding the documents cited in support of the Office Action's position, namely Elliot *et al.*, Cecil, and Wagner *et al.* In particular, Applicants note that the Office Action's arguments are inconsistent with the disclosures of the references.

For example, although Applicants' claims are directed towards the treatment of overactive bladder, the Office Action refers to several portions within Cecil that are directed solely towards urinary incontinence. Indeed, Applicants' specification discloses that overactive bladder is not limited to that which presents with incontinence.

Further, on page 5 of the Office Action, the Office Action asserts that "[Cecil] teaches that urge incontinence is the most common and bothersome symptomatic type of urinary incontinence in the geriatric population and ... [that] men, diabetics and patients with

neurological disorders are at highest risk for this type of urinary incontinence.” However, the Office Action has misconstrued this passage of the reference. Rather, on page 640 of Cecil, it is disclosed that “[the] symptoms and signs of *overflow incontinence* are non-specific and may mimic those of the stress and urge types. Men, diabetics and patients with neurological disorders are at highest risk for *this type* of urinary incontinence.” (Emphasis added.) This is significant because on page 640, Cecil disclose that “urinary incontinence can be categorized into four basic types,” of which urge incontinence is one and overflow incontinence is another. Thus, the Office Action’s own references disclose that diabetics are at risk for overflow incontinence, rather than urge incontinence. As is evidenced by Table 119-3 of Cecil, overflow incontinence is distinct from the urge incontinence that may accompany overactive bladder. This distinction is further established on page 353 of Elliot *et al.*, where it is stated that “[overactive bladder] is a complex of symptoms (urinary urgency, frequency, and urge incontinence).”

Further still, on page 23 of Cecil, as cited by the Office Action, it is disclosed that “[the] most common cause of urinary incontinence ... is overactivity of the bladder detrusor.” Table 8.1 clearly discloses the difference between urge incontinence and overflow incontinence, in that detrusor instability results in urge incontinence, whereas bladder atony caused by long-standing diabetes results in overflow incontinence.

Applicants note that overflow incontinence is urinary incontinence caused by underactivity of the bladder. On the other hand, urge incontinence is urinary incontinence caused by overactivity of the bladder. In this regard, it is apparent that the claimed method for treating overactive bladder does not include overflow incontinence. One skilled in the art would understand that urge incontinence is urinary incontinence which accompanies overactive bladder.

Therefore, the Office Action's reliance on Cecil to support the position that diabetic patients are more at risk for urge incontinence, is flawed. Rather, the Office Action's cited references, and the state of the art as a whole, establish that diabetics are at increased risk of incontinence through diabetes-induced neuropathy that results in bladder atony (i.e., a decrease in bladder detrusor function) and consequently, overflow incontinence. Cecil makes no mention that diabetics are at risk from urge incontinence or overactive bladder; Cecil merely discloses that overactive bladder is common in the elderly. Accordingly, Cecil fails to provide any support for the Office Action's position. To the contrary, Table 8.1 of Cecil establishes that urge incontinence arises from detrusor instability (which in the text is described as "overactivity of the bladder detrusor"), whereas overflow incontinence is caused by atony of the bladder, caused by underactivity of the bladder detrusor. Considering the deficiencies of Cecil, Applicants note that this reference cannot be reasonably be applied to maintain such a rejection in accordance with the Office Action's arguments.

Next, the Office Action refers to Wagner *et al.*, which allegedly disclose that individuals with overactive bladder have a higher prevalence of diabetes and congestive heart failure. Although the Office Action's position may have merit to the extent that some patients with diabetes have overactive bladder, the Office Action's assertion that the "diabetic patient population and the instant targeted treatment population overlaps as evidenced by the prior art" is insufficient to maintain a finding of inherency. Specifically, the Office Action has failed to provide any evidence of the existence of overactive bladder amongst diabetics treated with the claimed compound. Rather, the Office Action relies solely upon a hypothetical situation in which a very select population of diabetics could be treated with the claimed compound.

Moreover, Wagner *et al.* does not disclose treatment of diabetic patients with the compound of the present invention for treatment of overactive bladder.

Thus, the Office Action has failed to point to a specific portion of any reference cited which discloses the claimed method being performed, either explicitly, or inherently; at no point do patients which have diabetes and overactive bladder receive the claimed compound.

Pursuant to M.P.E.P. 2112, “[the] fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic.” Indeed, “[inherency] may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient [to establish inherency]” See *In re Robertson*, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir 1999).

Therefore, the hypothetical situation posed by the Office Action, namely that a population of diabetics treated with the claimed compound may have overactive bladder, does not meet the legal standard to maintain a rejection based on inherency. Rather, the treatment of diabetic patients with the claimed compound does not “necessarily” perform the claimed method, as is required to establish inherency, because the diabetic patients do not “necessarily” suffer from overactive bladder. Thus, the administration of the claimed compound to patients suffering from overactive bladder is not inherently disclosed in the cited references.

Further, Applicants note that the documents cited by the Office Action teaches away from using the claimed compound. The documents cited by the Office Action disclose bladder atony as the cause of incontinence in diabetics, and administration of the claimed compound (which is an anticholinergic), would result in further decrease in bladder detrusor activity, resulting in

greater incontinence. This effect would be known to one of ordinary skill in the art, and represents at least one reason why patients with diabetes and urinary overflow incontinence would not be administered the claimed compound.

Accordingly, reconsideration and withdrawal of the Nonstatutory Obviousness-Type Double Patenting rejection is respectfully requested.

Response To Rejection Under 35 USC § 102(b)

On page 8 of the Office Action, the Office Action rejects Claims 1-10 under 35 U.S.C. §102(b) as being anticipated by Maruyama *et al.* (WO 99/20607; the equivalent English translation being U.S. Patent No. 6,346,532 B1) for the same reasons as set forth above under the Nonstatutory Obviousness-Type Double Patenting rejection.

As previously presented in Applicants' Amendment filed August 2, 2007, Maruyama is directed to amide derivatives represented by general formula (I), and is disclosed to be useful as a diabetes remedy.

As discussed above, the documents cited by the Office Action, support Applicants' position that Maruyama does not explicitly or inherently disclose the claimed method for treating overactive bladder. In fact, based upon the disclosure in the documents cited by the Office Action, Maruyama teaches away from using the claimed compound for treatment of diabetes. Specifically, the documents cited by the Office Action disclose bladder atony as the cause of incontinence in diabetics, and administration of the claimed compound (which is an anticholinergic), would result in a further decrease in bladder detrusor activity and greater incontinence. The administration of the claimed compound would be counterintuitive to the treatment of urinary overflow incontinence in patients with diabetes.

Moreover, there is no disclosure in Maryuma to administer the compound of the present invention to human patients with diabetes despite the Office Action's contention that the compound of the present invention would be useful for treating diabetes. Thus, there is nothing in Maryuma that describes treatment of diabetic patients by the claimed method comprising administering the compound of the present invention.

Accordingly, reconsideration and withdrawal of the rejection under §102(b) is respectfully requested.

CONCLUSION

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

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